(19) World Intellectual Property Organization International Bureau



- 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801 - 1801

(43) International Publication Date 10 June 2004 (10.06.2004)

PCT

(10) International Publication Number WO 2004/047734 A2

(51) International Patent Classification7:

A61K

(21) International Application Number:

PCT/US2003/037157

(22) International Filing Date:

21 November 2003 (21.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

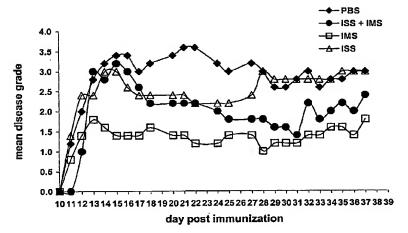
(30) Priority Data: 60/428,643 21 November 2002 (21.11.2002)

(71) Applicants (for all designated States except US): BAY-HILL THERAPEUTICS, INC. [US/US]; 3430 West Bayshore Road, Suite 201, Palo Alto, CA 94303 (US). THE BOARD OF TRUSTEES OF THE LELAND STANFORD UNIVERSITY [US/US]; Office of Technology Licensing, 1705 El Camino Real, Palo Alto, CA 94306-1106 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GARREN, Hideki [US/US]; 417 E. Meadow Drive, Palo Λlto, CΛ 94306 (US). HO, Peggy P., [US/US]; 11119 Flowering Pear Drive, Cupertino, CA 95014 (US). STEINMAN, Lawrence [US/US]; 1020 Vernier Place, Stanford, CA 94305 (US).
- (74) Agents: SHERBINA, Nicholas V., et al.; TOWNSEND and TOWNSEND and CREW LLP, Two Embarcadero Center, 8th Flr., San Francisco, CA 94111 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: METHODS AND IMMUNE MODULATORY NUCLEIC ACID COMPOSITIONS FOR PREVENTING AND TREATING DISEASE



(57) Abstract: This invention relates to methods and compositions for treating or preventing disease comprising the administration of immune modulatory nucleic acids having one or more immune modulatory sequences (IMSs). The invention further relates to the means and methods for the identification of the IMSs for preventing or treating disease, more particularly the treatment and prevention of autoimmune or inflammatory diseases. The invention also relates to the treatment or prevention of disease comprising the administration of the immune modulatory nucleic acids alone or in combination with a polynucleotide encoding self-protein(s), -polypeptide(s) or -peptide(s) or -peptide(s). The present invention also relates to methods and compositions for treating diseases in a subject associated with one or more self-protein(s), -polypeptide(s) or -peptide(s) that are present in the subject and involved in a non-physiological state.



0 2004/047734 A2 ||||||